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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/040,222	10/29/2001	Bjorn B. Levidow	207203	2902

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EXAMINER	
KOMOL, VAJIRACHAI	
ART UNIT	**PAPER NUMBER**
2115	

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/040,222	LEVIDOW ET AL.	
	Examiner	Art Unit	
	Vajirachai Komol	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *29 October 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 October 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: display 116 (page 6, line 19), text input area 504 (page 9, line 12), snapshot 1308 (page 10, line 6), step 905 (page 16, line 3) and snapshot module 1172 (page 16, line 15). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-3, 5, 8-9, 13, and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skibinski (U.S. Pat. 6,654,798) in the view of Nathan (U.S. Pat. 6,647,492).

Regarding claim 1, Skibinski discloses a computer-implemented method for obtaining information about a shutdown of a computer (col. 2 lines 1-3), the computer having at least one user-mode process (col. 3 lines 17-21 and/or fig.1 item 44), the method comprising: presenting a user (agent) with a plurality of reasons for the shutdown of the computer (col. 3 line 24 and fig.3 item 16), receiving a user selection of at least one of the plurality of reasons (col. 3 lines 26-29 and fig. 3 item 18) and capturing the state of the user-mode process for subsequent analysis (col. 7 line 64 - col. 8 line 4). However, Skibinski does not disclose a method of storing the selected reason in the memory. Nathan teaches a method of storing the selected reason in the memory (col. 7 lines 20-22). It would appear that Nathan's motivation for storing comprehensive records of the shutdown reasons is to allow for diagnoses and analysis of how the shutdown occurred. At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski with Nathan's method of storing the selected reason in the memory in order to create comprehensive records of the shutdown reasons for further diagnoses and analysis.

Regarding claim 2, examiner takes Official Notice that storing computer executable method instructions on a computer-readable medium such as a CD-ROM is well known in the art. Accordingly, it would have been obvious to one of

ordinary skill in the art at the time the invention was mad, to store the method of claim 1 on a CD-ROM.

Regarding claim 3, Skibinski teaches the method of claim 1, further comprising: retrieving the plurality of reasons from a system database (col. 3 lines 23-24); and, presenting the retrieved reasons to the user (col. 3 lines 23-24 and/or fig.3 item 16).

Regarding claim 5, Skibinski teaches the method of claim 1, wherein at least one of the plurality of reasons is user-configurable (col. 2 lines 19-20, custom-defined shutdown reasons would be customized by a user and thus are user-configurable).

Regarding claim 8, Skibinski teaches the method of claim 1, wherein the user initiates the shutdown of the computer (col. 3 lines 22-23) and selects one or more reasons for shutting down the computer at a remote computer (col. 3 lines 26-27) that is in communication with the computer being shut down (col. 3 lines 19-21)

Regarding claim 9, Skibinski teaches the method of claim 1, further comprising prompting the user to enter the shutdown reason (col. 3 lines 24-26) in response to the user initiating a shutdown of the computer (col. 3 lines 22-23).

Regarding claim 13, Skibinski teaches the method of claim 1, further comprising receiving a user indication of a remote machine that is being shutdown (col. 3 lines 26-29).

Regarding claim 19, Skibinski teaches a computer-implemented method for obtaining information about a shutdown of a computer (col. 2 lines 1-3), wherein the computer has a memory, the method comprising: receiving from a user a reason for shutting down the computer (col. 3 lines 26-29 and/or fig. 3 item 18), wherein the reason is one of a plurality of predefined shutdown reasons (col. 3 lines 23-24); taking a snapshot of the state of all of the user-mode processes that are running on the computer at the time of the shutdown (col. 7 line 64 - col. 8 line 1). However, Skibinski does not disclose a method of storing the received reason and the snapshot in the memory. Nathan teaches a method of storing the received reason and the snapshot in the memory (col. 7 lines 20-23). It would appear that Nathan's motivation for storing comprehensive records of the shutdown reasons is to allow for diagnoses and analysis of how the shutdown occurred. At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski with Nathan's method of storing the selected reason in the memory in order to create comprehensive records of the shutdown reasons for further diagnoses and analysis.

Regarding claim 20, examiner takes Official Notice that storing computer executable method instructions on a computer-readable medium such as a CD-

ROM is well known in the art. Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was mad, to store the method of claim 1 on a CD-ROM.

Regarding claim 21, Skibinski teaches the method of claim 19, further comprising, in response to the user initiating the shutdown of the computer (col. 3 lines 22-23), prompting the user to enter the shutdown reason (col.3 lines 25-28).

4. Claims 4, 6-7, 10-12, 14, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skibinski (U.S. Pat 6,654,798) in the view of Nathan (U.S. Pat. 6,647,492) and further in view of Connelly (U.S. Pat. 6,594,786).

Regarding claim 4, as set forth above, Skibinski and Nathan teach all the limitations of claims 1 and 3. However, neither Skibinski nor Nathan disclose the method of claim 3, wherein the reasons are retrieved from entries located in a system database, wherein each reason entry indicates whether the reason is to be displayed during a shutdown of the computer, or during a restart of the computer following a shutdown. Connelly teaches wherein the reasons are retrieved from entries located in a system database (col. 7 lines 41-42, TABLE 1), wherein each reason entry indicates whether the reason is to be displayed during a shutdown of the computer (col. 7 lines 36-42, each reason in TABLE 1 indicates whether the shutdown reason is planned or unplanned and as a result, planned reasons will be displayed during a shutdown of the computer), or during

a restart of the computer following a shutdown (col. 7 lines 44-52, each reason in TABLE 1 indicated whether the shutdown reason is planned or unplanned and as a result, unplanned/crash reasons will be executed during a restart of the computer following a shutdown) in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67- col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method of receiving from the user a selection of whether the shutdown was planned or unplanned; and, storing the planned or unplanned selection in the memory in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 6, as set forth above, Skibinski and Nathan teach all the limitations of claim 1. However, neither Skibinski nor Nathan discloses the method of claim 1, further comprising: receiving from the user a typed-in description of at least one reason for the shutdown; and storing the typed-in description in the memory. Connelly teaches a method of receiving from the user a typed-in description of at least one reason for the shutdown (col. 7 line 37 along with TABLE 1); and storing the typed-in description in the memory (col. 7 line 39, "writing the reason to the shutdown log") in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67- col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method of receiving from the user a typed-in description of at least one reason for the

shutdown; and storing the typed-in description in the memory in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 7, as set forth above, Skibinski and Nathan teach all the limitations of claim 1. However, neither Skibinski nor Nathan disclose the method of claim 1, further comprising: receiving from the user a selection of whether the shutdown was planned or unplanned; and, storing the planned or unplanned selection in the memory. Connelly teaches a "Planned" downtime results from scheduled activities such as backup, maintenance, and upgrades and "Unplanned" downtime is the result of an unscheduled outage such as system crash, hardware or software failure, or environmental incident such as loss of power or natural disaster (see TABLE 1). Connelly also teaches a method of receiving from the user a selection of whether the shutdown was planned or unplanned (col. 15 lines 64-65 along with TABLE 1); and, storing the planned or unplanned selection in the memory (col. 7 lines 36-41) in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67-col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method of receiving from the user a selection of whether the shutdown was planned or unplanned; and, storing the planned or unplanned selection in the memory in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 10, as ser forth above, Skibinski and Nathan teach all the limitations of claim 1. However, neither Skibinski nor Nathan disclose the method of claim 1, further comprising prompting the user to enter the shutdown reason in response to the user restarting the computer subsequent to the computer being shutdown. Connelly teaches a method to prompting the user to enter the shutdown reason in response to the user restarting the computer subsequent to the computer being shutdown (col. 7 lines 44-52, prior to sending "unplanned shutdown" (line 51) to the server would mean a reason must be enter by a user and therefore, it must be prompt by the system upon restarting) in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67 – col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method to prompting the user to enter the shutdown reason in response to the user restarting the computer subsequent to the computer being shutdown in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claims 11 and 12, as set forth above, Skibinski and Nathan teach all the limitations of claim 1.

However, with respect to claim 11, neither Skibinski nor Nathan discloses the method of claim 1, wherein the reason is received via a command line interface.

And, with respect to claim 12, neither Skibinski nor Nathan discloses the method of claim 11, wherein the reason is received in the form of a reason code.

Connelly teaches, with respect to claim 11, wherein the reason is received via a command line interface (col. 7 line 37 or col. 12 lines 25-26) and, with respect to claim 12, wherein the reason is received in the form of a reason code (TABLE 1, Cause #) in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67 – col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method wherein the reason is received via a command line interface and the reason is received in the form of a reason code in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 14, as set forth above, Skibinski and Nathan teach all the limitations of claim 1. However, neither Skibinski nor Nathan disclose the method of claim 1, further comprising: determining, based on the user specified selection, whether the shutdown is planned or unplanned; and if the shutdown is determined to be unplanned, performing the capturing step. Connelly teaches a method to determining, based on the user specified selection, whether the shutdown is planned or unplanned (col. 7 lines 37-41 along with TABLE 1); and if the shutdown is determined to be unplanned, performing the capturing step (col. 7 lines 48-52) in order to improve system recovery times by quickly identifying

unavailable systems (col. 1 line 67 – col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method to determining, based on the user specified selection, whether the shutdown is planned or unplanned; and if the shutdown is determined to be unplanned, performing the capturing step in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 22, as ser forth above, Skibinski and Nathan teach all the limitations of claim 19. However, neither Skibinski nor Nathan disclose the method of claim 19, further comprising, in response to the user rebooting the computer after an unexpected shutdown, prompting user to enter the reason for the unexpected shutdown. Connelly teaches a method in response to the user rebooting the computer after an unexpected shutdown (col. 7 line 44), prompting user to enter the reason for the unexpected shutdown (col. 7 line 52, prior to sending "unplanned shutdown" (line 51) to the server would mean a reason must be enter by a user and therefore, it must be prompt by the system upon rebooting) in order to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67 – col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's method in response to the user rebooting the computer after an unexpected shutdown, prompting user to enter the reason for the unexpected shutdown in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

5. Claims 15-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connelly (U.S. Pat. 6,594,786) in further view of Nathan (U.S. Pat. 6,647,492).

Regarding claim 15, Connelly teaches a computer-implemented method for obtaining information about a shutdown of a computer, the method comprising: at a command-line interface (col. 12 lines 25-26), receiving a user entry of a command to shutdown the computer (col. 7 line 37) along with at least one shutdown reason code (TABLE 1, Cause #); searching a list of predefined shutdown reason codes to determine whether the entered shutdown reason code is recognized (TABLE 1, Cause #); if the reason code indicates that the shutdown is unplanned, taking a snapshot of the current state of each of a plurality of user-mode processes (col. 7 lines 48-52, system "crash" is an example of an unplanned shutdown and the snapshot of the current state appears to include at least the timestamp in the status file and the unplanned shutdown log); and storing the snapshot in a non-volatile memory (col. 7 line 52, "unplanned shutdown" appears to includes at least a snapshot of the timestamp in the status file and then sent to the server for future diagnose and analysis and therefore, "unplanned shutdown" must be stored in a non-volatile memory). However, Connelly does not disclose storing the entered reason code in a memory. Nathan teaches a method of storing the entered reason code in a memory (col. 7 line 20-22, the precondition, "if the entered reason code is

recognized" is taught by Connelly, see TABLE 1, Cause #). It would appear that Nathan's motivation for storing comprehensive records of the shutdown reasons is to allow for diagnoses and analysis of how the shutdown occurred. At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Connelly with Nathan's method of storing the entered reason code in a memory in order to create comprehensive records of the shutdown reasons for further diagnoses and analysis.

Regarding claim 16, Connelly teaches a computer-readable medium having stored thereon computer-executable instructions for performing the method of claim 15 (figure 1 item 8).

Regarding claim 17, Connelly teaches the method of claim 15, wherein the receiving step further comprises receiving the name of the computer that is being shutdown (figure 8F item 260, ENTITY) and wherein the storing step further comprises storing the reason code on a memory of the named computer (figure 8F item 260, NOTES).

Regarding claim 18, Connelly teaches the method of claim 15, wherein the receiving step further comprises receiving the name of the computer that is being shutdown (figure 8F item 260, ENTITY), and wherein the storing step further comprises storing the snapshot on a memory of the named computer (figure 8F).

6. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skibinski (U.S. Pat. 6,654,798) in further view of Connelly (U.S. Pat. 6,594,786).

Regarding claim 23, Skibinski discloses a method for obtaining information about the shutdown of a computer, the method comprising: in response to a user initiating the shutdown of a computer (col. 3 lines 22-23): retrieving a list of preconfigured shutdown reasons from a database on the computer (col. 3 lines 23-24); presenting the list of preconfigured shutdown reasons to the user (col. 3 lines 23-24); prompting the user to select one or more of the preconfigured reason (col. 3 lines 25-27); storing the selected preconfigured reason or reasons in a log file on the computer (col. 3 lines 28-29). However, Skibinski does not teach if the selected shutdown reason indicates that the shutdown is unplanned, taking a snapshot of the current state of the user mode processes on the computer; storing the snapshot on a non-volatile memory of the computer and, shutting down the computer. Connelly teaches if the selected shutdown reason indicates that the shutdown is unplanned (col. 7 line 49, system "crash" is an example of an unplanned shutdown), taking a snapshot of the current state of the user mode processes on the computer (col. 7 lines 48-52, snapshot of the current state appears to include at least the timestamp in the status file and the unplanned shutdown log); storing the snapshot on a non-volatile memory of the computer (col. 7 line 52, "unplanned shutdown" is sent to the server for future diagnoses and analysis therefore, it must be save on a non-volatile memory)

and, shutting down the computer (a consequence from initiating the shutdown command). Connelly's motivation is to improve system recovery times by quickly identifying unavailable systems (col. 1 line 67 – col. 2 line 1). At the time of the invention it would have been obvious to a person of ordinary skill in the art to provide Skibinski or Nathan with Connelly's teaching in order to provide improved system recovery times (col. 1 line 67 – col. 2 line 1).

Regarding claim 24, examiner takes Official Notice that storing computer executable method instructions on a computer-readable medium such as a CD-ROM is well known in the art. Accordingly, it would have been obvious.

Regarding claim 25, Connelly teaches the method of claim 23, further comprising: prornpting the user to select whether the shutdown is planned or unplanned (col. 7 line 38 along with TABLE 1, definition of "planned" and "unplanned" col. 1 line 56-61); and, storing the planned or unplanned selection in the log file (col. 7 line 39).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vajirachai Komol whose telephone number is (571) 272-5858. The examiner can normally be reached on 8:00 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on (571) 272-3667. The fax

phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free)

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V.K.